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TELECOMMUNICATIONS  
**TIA**  
INDUSTRY ASSOCIATION

June 25, 1997

Mr. William Caton  
Acting Secretary  
Federal Communication Commission  
1919 M Street, N.W. Rm 222  
Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

RE: ET Docket No. 95-18  
RM-7927  
PP-28

Dear Mr. Caton:

The Spectrum & Orbit Utilization Section (SOUS) of the Satellite Communications Division (SCD) of TIA hereby submits its comments in the above referenced docket regarding the Further Notice of Proposed Rulemaking ("Further Notice"). Comments in this proceeding were due to be filed on June 23, 1997. However, due to the need to receive the necessary clearance from the TIA Section members concerned, these comments are being filed two days late.

We request that the Commission accept these comments and consider them in the course of making final determinations in this proceeding.

Sincerely,

  
Thanos Kipreos

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BEFORE THE

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*Federal Communications Commission*

JUN 25 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

WASHINGTON, D.C. 20554

In the Matter of

|                                   |   |                     |
|-----------------------------------|---|---------------------|
| Amendment of Section 2.106 of the | ) |                     |
| Commission's Rules to Allocate    | ) | ET Docket No. 95-18 |
| Spectrum at 2 GHz for Use         | ) | RM-7927             |
| by the Mobile Satellite Service   | ) | PP-28               |

COMMENTS ON THE FURTHER NOTICE  
OF PROPOSED RULEMAKING

Pursuant to the Commission's Rules, 47 C.F.R. Section 1.405, the Spectrum & Orbit Utilization Section (SOUS) of the Satellite Communications Division of the Telecommunications Industry Association (TIA)<sup>1</sup> submits these comments on the Further Notice of Proposed Rulemaking ("Further Notice") in this proceeding. These comments reflect the view of the SOUS. However, the SOUS and the Fixed Point-to-Point Communications Section of the Network Equipment Division of TIA both

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<sup>1</sup>TIA is a full-service national organization with membership of over 600 large and small companies which provide communications and information technology products, materials, systems, distribution services and professional services in the United States and countries around the world. TIA represents the telecommunication industry in association with the Electronic Industries Association. On occasion TIA files in its own name, representing the entire association. Sometimes, a product-oriented division or a section of such division will file in a proceeding representing the views of only the members of that division or section. This instant filing is from the Spectrum & Orbit Utilization Section of the Satellite Communications Division of TIA. On June 6, 1997 the Fixed Point-to-Point Communications Section of The Network Equipment Division of TIA, representing the members of that Section, filed comments in the Further Notice.

oversee the TIA Joint Working Group ("JWG") known as TR.34.2/TR.14.11.<sup>2</sup> The JWG is concerned with developing methodologies and interference criteria to assess the sharing possibilities between the Mobile-Satellite Service ("MSS") and Fixed Point-to-Point Microwave Service ("FS") in the 2165-2200 MHz band. The comments presented herein address only those issues raised in the Further Notice that impact the interests of the satellite communications industry as represented in the SOUS.

In both the First Report and Order ("Order") and in the Further Notice in this proceeding, the Commission recognizes that... "the MSS and FS industries are currently developing interference standards and sharing arrangements under the good offices of TIA. We propose to adopt these standards, or their successors, in determining whether our sunset rules would apply to a given FS incumbent."<sup>3</sup> TIA believes that the Commission's reliance on the work of the JWG is well placed and that the cooperative arrangements developed between the two industries and the good progress now being made should produce results that can be adopted by the Commission and used by the industries in determining sharing arrangements in the 2165-2200 MHz band. TIA urges the Commission to continue to rely on the MSS/FS JWG to resolve the compatibility and sharing situations described in the Further

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<sup>2</sup>The JWG includes the National Spectrum Managers Association ("NSMA"). NSMA is a voluntary association of microwave radio licensees, mobile communication services licensees (PCS and cellular), satellite licensees, equipment manufacturers and frequency coordinators. The purpose of the association is to provide a forum for discussion and resolution of issues of common interest to the frequency coordinating community.

<sup>3</sup>See Further Notice at paragraph 77

Notice.

Given the progress being made in the JWG<sup>4</sup>, TIA is concerned that the Commission's decisions in this proceeding could cause an immediate relocation of FS operations from the 2110-2130 and 2160-2180 MHz bands and thereby negate a major part of the JWG work for the reasons discussed below.

The Commission's Order allocates 35 MHz of spectrum at 1990-2025 MHz (earth-to-space) and 35 MHz of spectrum at 2165-2200 MHz (space-to-earth) to the MSS, effective January 1, 2000. In making this allocation, the Commission determined that the Broadcast Auxiliary Service ("BAS") should be allocated spectrum at 2110-2130 MHz to compensate for the fact that BAS would be required to vacate the newly allocated MSS band at 1990-2025 MHz. This band segment is currently occupied by channels 1 and 2 of a total of seven channels available at 2 GHz to BAS for Electronic News Gathering ("ENG") using microwave radio equipment on trucks and other mobile units that can be rapidly deployed at temporary locations for remote operations with signals beamed back to the TV station studio.

The allocation of the 2110-2130 MHz band to BAS would require relocation of FS operations not only in this band, but also in the paired band at 2160-2180 MHz. As the Commission noted,<sup>5</sup> the BAS/ENG and FS generally cannot share spectrum. We believe this to be the case in the 2110-2130 MHz band due to the unpredictable

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<sup>4</sup>An update on the progress to date of the work of the JWG is being filed with the Commission under separate cover.

<sup>5</sup>See Further Notice at paragraph 69

and mobile nature of the ENG operations. Therefore, and in reply to the Commission's request in paragraph 69 of the Further Notice seeking comment on whether it is necessary to completely clear fixed services from the 2110-2130 MHz band before relocated BAS operations can begin in that band, we foresee the need to relocate all FS operations from this band under the Commission's plan and assuming that the BAS/ENG will use this band in all markets across the country. However, since the BAS interests are not represented in the JWG, we cannot judge the degree to which the BAS may intend or need to use the new band.<sup>6</sup>

Given the paired nature of the 2110-2130 MHz and 2160-2180 MHz bands, FS operations in both bands would need to be relocated. The experience and engineering judgment of the Fixed Point-to-point Microwave Service operators<sup>7</sup> is that it would not be operationally feasible to operate one-half of the duplex link at 2 GHz and the other half in the 6 or 11 GHz band due to a number of factors.<sup>8</sup>

It is recognized that it is possible that the FS may have to be relocated from the 2160 -2200 MHz band to accommodate the MSS under the FCC plan and that this would subsequently require the FS to relocate from the 2110-2150 MHz paired

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<sup>6</sup>Although the Commission encourages the MSS, BAS, and FS industries to study the feasibility of band sharing between any two or all three of these services on a short term or permanent basis, there is presently no forum where these three industries can address these matters. Of course, the MSS and FS industries are represented in the JWG.

<sup>7</sup>See Comments on the Further Notice of Proposed Rulemaking filed by the Fixed Point - to - Point Communication Section of the Network Equipment Division of TIA on June 6, 1997, page 1.

<sup>8</sup>See Further Notice at paragraph 79

band. However, it is anticipated that the work of the JWG will be successful in developing mutually acceptable sharing rules which will enable the FS and MSS to share the 2165-2200 MHz band for some period of time in order to enable a gradual, rather than abrupt, phased transition between the FS and MSS in the band.

Given that the FCC plan would require the immediate relocation of the FS from the 2110-2130 MHz and the 2160-2180 MHz band, there would not be any period of sharing between the FS and MSS and a gradual transition would not be possible. In this situation, the work of the JWG would no longer be relevant in the 2160-2180 MHz segment of the band.

TIA makes the observation that the BAS currently uses analog technology for ENG operations and that the Commission has established a rapid timetable for the broadcast industry to convert from analog to digital technology in a recent decision.<sup>9</sup> This raises the question as to whether the broadcast industry could use digital technology for ENG at an early date to increase spectrum efficiency within its existing allocation to gain sufficient BAS/ENG channels without the need for the additional spectrum at 2110-2130 MHz.

In view of the Commission's apparent intent to explore options and likely scenarios for conversion from analog to digital BAS and the possible implications for BAS spectrum requirement,<sup>10</sup> TIA encourages the Commission to explore all

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<sup>9</sup>See Advanced Television Systems and Their Impact upon the Existing Broadcast Service, FCC 97-116 (Apr. 21, 1997) at paragraph 76.

<sup>10</sup>See Further Notice at paragraph 68

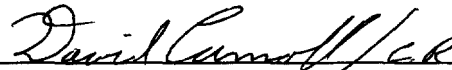
reasonable options to increase spectrum efficiency and to consider alternatives that would not

immediately force the relocation of FS from the 2110-2130 MHz band, which would in turn force the relocation of FS in the 2160 - 2180 MHz band.

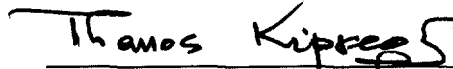
We request that the Commission take these views into account in reaching final determinations in this proceeding.

Respectfully submitted,

SPECTRUM AND ORBIT UTILIZATION  
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SATELLITE COMMUNICATIONS DIVISION,  
TELECOMMUNICATIONS INDUSTRY  
ASSOCIATION



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Spectrum and Orbit Utilization Section,  
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Thanos Kipreos, Director,  
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## CERTIFICATE OF SERVICE

I, Chris Ramey, hereby certify that on this 25th day of June, 1997, copies of TIA's Comments on the Further Notice of Proposed Rulemaking in Docket No. 95-18 were mailed to the following:

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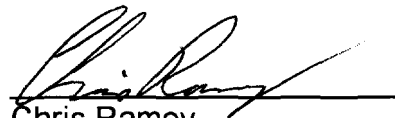
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